The Keadby 3 Low Carbon Gas Power Station Project

Document Ref: 5.4

Planning Inspectorate Ref: EN010114

The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order

Land at and in the vicinity of the Keadby Power Station site, Trentside, Keadby, North Lincolnshire

Schedule of Other Consents and Licences

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(q)

Applicant: Keadby Generation Limited

Date: May 2021

DOCUMENT HISTORY

Document Ref	5.4/ Schedule of Other Consents and Licences
Revision	VP1.0
Document Owner	AECOM

GLOSSARY

Abbreviation	Description
AGI	Above Ground Installation - installations used to support the safe and efficient operation of a pipeline; above ground installations are needed at the start and end of a cross-country pipeline and at intervals along the route.
AIL	Abnormal Indivisible Loads - a load that cannot be broken down into smaller loads for transport without undue expense or risk of damage. It may also be a load that exceeds certain parameters for weight, length and width.
APFP	Applications: Prescribed Forms and Procedure
CAA	Civil Aviation Association - responsible for the regulation of aviation safety in the UK.
CCGT	Combined Cycle Gas Turbine - a highly efficient form of energy generation technology. An assembly of heat engines work in tandem using the same source of heat to convert it into mechanical energy which drives electrical generators and consequently generates electricity.
CCP	Carbon Capture Plant – plant used to capture carbon dioxide (CO_2) emissions produced from the use of fossil fuels in electricity generation and industrial processes.
CDM	Construction Design and Management Regulations 2015 - legal duties for safe operation of UK construction sites, including health and safety plans.
COMAH	Control of Major Accident Hazards - Regulations to ensure that businesses take all necessary measures to prevent major accidents involving dangerous substances.
DCO	Development Consent Order - made by the relevant Secretary of State pursuant to The Planning Act 2008 to authorise a Nationally Significant Infrastructure Project. A DCO can incorporate or remove the need for a range of consents which would otherwise be required for a development. A DCO can also include rights of compulsory acquisition.

Abbreviation	Description
DML	Deemed Marine Licence - licence provided by the Marine Management Organisation, granted as part of a DCO
EA	Environment Agency - a non-departmental public body sponsored by the United Kingdom government's Department for Environment, Food and Rural Affairs (DEFRA), with responsibilities relating to the protection and enhancement of the environment in England.
EIA	Environmental Impact Assessment - a term used for the assessment of environmental consequences (positive or negative) of a plan, policy, program or project prior to the decision to move forward with the proposed action.
EPC	Engineering, Procurement and Construction (Contractor)
ES	Environmental Statement - a report in which the process and results of an Environment Impact Assessment are documented.
Ha	Hectare – a metric unit of measurement, equal to 2.471 acres or 10,000 square metres.
HP	High Pressure
HRSG	Heat Recovery Steam Generator - an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
HSE	Health and Safety Executive - the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare.
IDB	Internal Drainage Board - a type of operating authority with permissive powers to undertake work to secure clean water drainage and water level management within drainage districts.
Kv	Kilovolt - unit of power
LPA	Local Planning Authority – a local government body.
MMO	Marine Management Organisation - an executive, non-departmental body in the United Kingdom with the responsibility of licencing, regulating and planning marine activities in the seas around England so that they are carried out in a sustainable way.
MW	Megawatt - unit of energy
NEP	Northern Endurance Partnership - a partnership between bp, Eni, Equinor, National Grid, Shell and Total to develop infrastructure to transport and store CO_2 emissions.
NLC	North Lincolnshire Council

Abbreviation	Description
NSIP	Nationally Significant Infrastructure Project - defined by the Planning Act 2008 and cover projects relating to energy (including generating stations, electric lines and pipelines); transport (including trunk roads and motorways, airports, harbour facilities, railways and rail freight interchanges); water (dams and reservoirs, and the transfer of water resources); waste water treatment plants and hazardous waste facilities. These projects are only defined as nationally significant if they satisfy a statutory threshold in terms of their scale or effect.
PINS	Planning Inspectorate - executive agency of the Department for Communities and Local Government of the United Kingdom Government. It is responsible for determining final outcomes of town planning.
SoS	Secretary of State title typically held by Cabinet Ministers in charge of Government Departments.
TTRO	Temporary Traffic Regulation Order – allows a local authority to regulate traffic for temporary periods by order or notice.
VCA	Vehicle Certification Agency
ZCH	Zero Carbon Humber Partnership - a consortium of energy and industrial companies and academic institutions with a shared vision to transform the Humber region into the UK's first net-zero carbon cluster by 2040.

CONTENTS

TABLES

EXECUTIVE SUMMARY

1. Keadby Generation Limited (the 'Applicant') is seeking development consent for the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine (CCGT) Generating Station ('the Proposed Development'). The Proposed Development is a new gas fired electricity generating station of up to 910 megawatts (MW) of gross electrical output with state-of-the art carbon capture technology and including cooling water, electrical, gas and utility connections, construction laydown areas and other associated works on land to the west of the existing Keadby 2 Power Station, under construction. The Proposed Development will therefore make a significant contribution toward the UK reaching its Net Zero greenhouse gas emissions target by 2050.

2. This document provides information on the other consents and licences that are, or may be, required under other legislation for the construction and operation of the Proposed Development, outside of the DCO (**Application Document Ref. 2.1**).

3. The document will be updated by the Applicant, as required, during the examination of the Application by the SoS.

1.0 INTRODUCTION

1.1 Overview

1.1.1 This 'Other Consents and Licences document (**Application Document Ref. 5.4**) has been prepared by AECOM on behalf of Keadby Generation Ltd (the 'Applicant') which is a wholly owned subsidiary of SSE plc. It forms part of the application (the 'Application') for a Development Consent Order (a 'DCO'), that has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under Section 37 of 'The Planning Act 2008' (the '2008 Act').

1.1.2 The Applicant is seeking development consent for the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine (CCGT) Generating Station ('the Proposed Development') on land at, and in the vicinity of, the existing Keadby Power Station, Trentside, Keadby, Scunthorpe DN17 3EF (the 'Proposed Development Site').

1.1.3 The Proposed Development is a new electricity generating station of up to 910 megawatts (MW) gross electrical output, equipped with carbon capture and compression plant and fuelled by natural gas, on land to the west of Keadby 1 Power Station and the (under construction) Keadby 2 Power Station, including connections for cooling water, electrical, gas and utilities, construction laydown areas and other associated development. It is described in **Chapter 4:** The Proposed Development of the Environmental Statement (ES) (ES Volume I - **Application Document Ref. 6.2**).

1.1.4 The Proposed Development falls within the definition of a 'Nationally Significant Infrastructure Project' (NSIP) under Section 14(1)(a) and Sections 15(1) and (2) of the 2008 Act, as it is an onshore generating station in England that would have a generating capacity greater than 50MW electrical output (50MWe). As such, a DCO application is required to authorise the Proposed Development in accordance with Section 31 of the 2008 Act.

1.1.5 The DCO, if made by the SoS, would be known as 'The Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order' ('the Order').

1.2 The Applicant

1.2.1 The Applicant, Keadby Generation Limited, is the freehold owner of a large part of the Proposed Development Site and is a wholly owned subsidiary of the FTSE 100-listed SSE plc, one of the UK's largest and broadest-based energy companies, and the country's leading developer of renewable energy generation. Over the last 20 years, SSE plc has invested over £20bn to deliver industry-leading offshore wind, onshore wind, CCGT, energy from waste, biomass, energy networks and gas storage projects. The Applicant owns and operates the adjacent Keadby 1 Power Station and is in the process of constructing Keadby 2 Power Station. SSE operates the Keadby Windfarm

which lies to the north and south of the Proposed Development Site and generates renewable energy from 34 turbines, with a total installed generation capacity of 68MW.

1.2.2 SSE has produced a 'Greenprint' document (SSE plc, 2020a) that sets out a clear commitment to investment in low carbon power infrastructure, working with government and other stakeholders to create a net zero power system by 2040. This includes investment in flexible sources of electricity generation and storage for times of low renewable output which will complement other renewable generating sources, using low carbon fuels and/ or capturing and storing carbon emissions. SSE is working with leading organisations across the UK to accelerate the development of carbon capture, usage and storage (CCUS) clusters, including Equinor and National Grid Carbon.

1.2.3 The design of the Proposed Development demonstrates this commitment. The Proposed Development will be built with a clear route to decarbonisation, being equipped with post-combustion carbon capture technology, consistent with SSE's commitment to reduce the carbon intensity of electricity generated by 60% by 2030, compared to 2018 levels (SSE plc, 2020b). It is intended that the Proposed Development will connect to infrastructure that will be delivered by the Zero Carbon Humber (ZCH) Partnership[1] and Northern Endurance Partnership (NEP)[2] for the transport and offshore geological storage of carbon dioxide.

1.3 What is Carbon Capture, Usage and Storage?

1.3.1 CCUS is a process that removes carbon dioxide emissions at source, for example emissions from a power station or industrial installation, and then compresses the carbon dioxide so that it can be safely transported to secure underground geological storage sites. It is then injected into layers of solid rock filled with interconnected pores where the carbon dioxide becomes trapped and locked in place, preventing it from being released into the atmosphere. Plate 1 shows what is involved in the process.

[1] https://www.zerocarbonhumber.co.uk/the-vision/

[2] https://www.zerocarbonhumber.co.uk/news/northern-endurance-partnership/

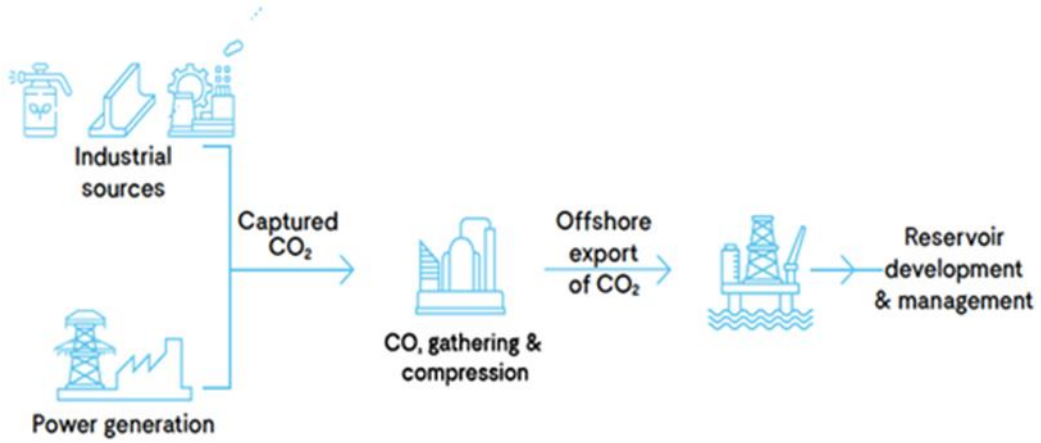

Plate 1: Schematic illustration of carbon capture, usage and storage

1.3.2 The technologies used in CCUS are proven and have been used safely across the world for many years. Geological storage sites are located far underground and are subject to stringent tests to ensure that they are geologically suitable. It is expected that the storage sites will be located offshore, in areas such as the North Sea. The NEP has been formed to develop the offshore infrastructure to transport and store carbon dioxide emissions in the North Sea.

1.3.3 CCUS is crucial to reducing carbon dioxide emissions and combatting global warming. The UK Government has committed to achieving Net Zero in terms of greenhouse gas emissions by 2050. This is a legally binding target. UK Government policy further states that the 'deployment of power CCUS projects will play a key role in the decarbonisation of the electricity system at low cost' (HM Government, 2020a, page 47).

1.3.4 The Proposed Development will provide up to 910MWe (gross) of dispatchable capacity and capture some 2 million tonnes of carbon dioxide per annum, dependent upon the turbine equipment chosen and the running hours of the plant. The Proposed Development could be up and running by the mid-2020s and will facilitate the timely development of a major CCUS cluster in the Humber region, making an important contribution towards the achievement of Net Zero by 2050.

1.4 The Proposed Development

1.4.1 The Proposed Development will work by capturing carbon dioxide emissions from the gas-fired power station and connecting into the ZCH Partnership export pipeline and gathering network for onward transport to the Endurance saline aquifer under the North Sea.

1.4.2 The Proposed Development would comprise a low carbon gas fired power station with a gross electrical output capacity of up to 910MWe and associated

buildings, structures and plant and other associated development defined in the Schedule 1 of the draft DCO (**Application Document Ref. 2.1**) as **Work No. 1** – 11 and shown on the Works Plans (**Application Document Ref. 4.3**).

1.4.3 At this stage, the final technology selection cannot yet be made as it will be determined by various technical and economic considerations and will be influenced by future UK Government policy and regulation. The design of the Proposed Development therefore incorporates a necessary degree of flexibility to allow for the future selection of the preferred technology in the light of prevailing policy, regulatory and market conditions once a DCO is made.

1.4.4 The Proposed Development will include:

- a carbon capture equipped electricity generating station including a CCGT plant (**Work No. 1A**) with integrated cooling infrastructure (**Work No. 1B**), and carbon dioxide capture plant (CCP) including conditioning and compression equipment, carbon dioxide absorption unit(s) and stack(s) (**Work No. 1C**), natural gas receiving facility (**Work No. 1D**), supporting uses including control room, workshops, stores, raw and demineralised water tanks and permanent laydown area (**Work No. 1E**), and associated utilities, various pipework, water treatment plant, wastewater treatment, firefighting equipment, emergency diesel generator, gatehouse, chemical storage facilities, other minor infrastructure and auxiliaries/ services (all located in the area referred to as the 'Proposed Power and Carbon Capture (PCC) Site' and which together form **Work No. 1**);
- natural gas pipeline from the existing National Grid Gas high pressure (HP) gas pipeline within the Proposed Development Site to supply the Proposed PCC Site including an above ground installation (AGI) for National Grid Gas's apparatus (**Work No. 2A**) and the Applicant's apparatus (**Work No. 2B**) (the 'Gas Connection Corridor');
- electrical connection works to and from the existing National Grid 400kV Substation for the export of electricity (**Work No. 3A**) (the 'Electrical Connection Area to National Grid 400kV Substation');
- electrical connection works to and from the existing Northern Powergrid 132kV Substation for the supply of electricity at up to 132kV to the Proposed PCC Site, and associated plant and equipment (**Work No. 3B**) (the 'Potential Electrical Connection to Northern Powergrid 132kV Substation');
- Water Connection Corridors to provide cooling and make-up water including:
  - underground and/ or overground water supply pipeline(s) and intake structures within the Stainforth and Keadby Canal, including temporary cofferdam (**Work No. 4A**) (the 'Canal Water Abstraction Option');
  - in the event that the canal abstraction option is not available, works to the existing Keadby 1 power station cooling water supply pipelines and

intake structures within the River Trent, including temporary cofferdam (**Work No. 4B**) (the 'River Water Abstraction Option');
    - works to and use of an existing outfall and associated pipework for the discharge of return cooling water and treated wastewater to the River Trent (**Work No. 5**) (the 'Water Discharge Corridor');
- towns water connection pipeline from existing water supply within the Keadby Power Station to provide potable water (**Work No. 6**);
- above ground carbon dioxide compression and export infrastructure comprising an above ground installation (AGI) for the undertaker's apparatus including deoxygenation, dehydration, staged compression facilities, outlet metering, and electrical connection (**Work No. 7A**) and an above ground installation (AGI) for National Grid Carbon's apparatus (**Work No. 7B**);
- new permanent access from A18, comprising the maintenance and improvement of an existing private access road from the junction with the A18 including the western private bridge crossing of the Hatfield Waste Drain (**Work No. 8A**) and installation of a layby and gatehouse (**Work No. 8B**), and an emergency vehicle and pedestrian access road comprising the maintenance and improvement of an existing private track running between the Proposed PCC Site and Chapel Lane, Keadby and including new private bridge (**Work No. 8C**);
- temporary construction and laydown areas including contractor facilities and parking (**Work No. 9A**), and access to these using the existing private roads from the A18 and the existing private bridge crossings, including the replacement of the western existing private bridge crossing known as 'Mabey Bridge') over Hatfield Waste Drain (**Work No. 9B**) and a temporary construction laydown area associated with that bridge replacement (**Work No. 9C**);
- temporary retention, improvement and subsequent removal of an existing Additional Abnormal Indivisible Load Haulage Route (**Work No. 10A**) and temporary use, maintenance, and placement of mobile crane(s) at the existing Railway Wharf jetty for a Waterborne Transport Offloading Area (**Work No. 10B**);
- landscaping and biodiversity enhancement measures (**Work No. 11A**) and security fencing and boundary treatments (**Work No. 11B**); and
- associated development including: surface water drainage systems; pipeline and cable connections between parts of the Proposed Development Site; hard standings and hard landscaping; soft landscaping, including bunds and embankments; external lighting, including lighting columns; gatehouses and weighbridges; closed circuit television cameras and columns and other security measures; site preparation works including clearance, demolition, earthworks, works to protect buildings and land, and utility connections; accesses, roads, roadways and vehicle and cycle parking; pedestrian and

cycle routes; and temporary works associated with the maintenance of the authorised development.

1.4.5 The Applicant will be responsible for the construction, operation (including maintenance) and eventual decommissioning of the Proposed Development, with the exception of the National Grid Gas compound works (**Work No. 2A**), the works within the National Grid Electricity Transmission 400kV substation (part of **Work No. 3A**), the works within the Northern Powergrid 132kV substation (part of **Work No. 3B**), and the National Grid Carbon compound works (**Work No. 7B**), which will be the responsibility of those named beneficiaries.

1.4.6 The Proposed Development includes the equipment required for the capture and compression of carbon dioxide emissions from the generating station so that it is capable of being transported off-site. ZCH Partnership will be responsible for the construction, operation and decommissioning of the carbon dioxide gathering network linking onshore power and industrial facilities including the Proposed Development in the Humber Region. The carbon dioxide export pipeline does not, therefore, form part of the Proposed Development and is not included in the Application but will be the subject of separate consent applications by third parties, such as the Humber Low Carbon Pipeline DCO Project by National Grid Carbon.

1.4.7 The Proposed Development will operate 24 hours per day, 7 days per week with programmed offline periods for maintenance. It is anticipated that in the event of CCP maintenance outages, for example, it will be necessary to operate the Proposed Development without carbon capture, with exhaust gases from the CCGT being routed via the Heat Recovery Steam Generator (HRSG) stack.

1.4.8 Various types of associated and ancillary development further required in connection with and subsidiary to the above works are detailed in Schedule 1 'Authorised Development' of the draft DCO (**Application Document Ref. 2.1**). This along with **Chapter 4:** The Proposed Development (ES Volume I - **Application Document Ref. 6.2**) provides further description of the Proposed Development. The areas within which each numbered Work (component) of the Proposed Development are to be built are defined by the coloured and hatched areas on the Works Plans (**Application Document Ref. 4.3**).

1.5 The Proposed Development Site

1.5.1 The Proposed Development Site (the 'Order Limits') is located within and near to the existing Keadby Power Station site near Scunthorpe, Lincolnshire and lies within the administrative boundary of North Lincolnshire Council (NLC). The majority of land is within the ownership or control of the Applicant (or SSE associated companies) and is centred on national grid reference 482351, 411796.

1.5.2 The existing Keadby Power Station site currently encompasses the operational Keadby 1 and (under construction) Keadby 2 Power Station sites, including the Keadby 2 Power Station Carbon Capture and Readiness reserve space.

1.5.3 The Proposed Development Site encompasses an area of approximately 69.4 hectares (ha). This includes an area of approximately 18.7ha to the west of Keadby 2 Power Station in which the generating station (CCGT plant, cooling infrastructure and CCP) and gas connection will be developed (the Proposed PCC Site).

1.5.4 The Proposed Development Site includes other areas including:

- Previously developed land, along with gas, towns water and other connections, and access routes, within the Keadby Power Station site;
- the National Grid 400kV Substation located directly adjacent to the Proposed PCC Site, through which electricity generated by the Proposed Development will be exported;
- Emergency Vehicle Access Road and Potential Electrical Connection to Northern Powergrid Substation, the routes of which utilise an existing farm access track towards Chapel Lane and land within the existing Northern Powergrid substation on Chapel Lane;
- Water Connection Corridors:
  - Canal Water Abstraction Option which includes land within the existing Keadby Power Station site with an intake adjacent to the Keadby 2 Power Station intake and pumping station and interconnecting pipework;
  - River Water Abstraction Option which includes a corridor that spans Trent Road and encompasses the existing Keadby Power Station pumping station, below ground cooling water pipework, and infrastructure within the River Trent; and
  - a Water Discharge Corridor which includes an existing discharge pipeline and outfall to the River Trent and follows a route of an existing easement for Keadby 1 Power Station;
- an existing river wharf at Railway Wharf (the Waterborne Transport Offloading Area) and existing temporary haul road into the into the existing Keadby 1 Power Station Site (the 'Additional Abnormal Indivisible Load (AIL) Route');
- a number of temporary Construction Laydown Areas on previously developed land and adjoining agricultural land; and
- land at the A18 Junction and an existing site access road, including two existing private bridge crossing of the Hatfield Waste Drain lying west of Pilfrey Farm (the western of which is known as Mabey Bridge, to be replaced, and the eastern of which is termed Skew Bridge) and an existing temporary gatehouse, to be replaced in permanent form.

1.5.5 In the vicinity of the Proposed Development Site the River Trent is tidal, therefore parts of the Proposed Development Site are within the UK marine area. No harbour works are proposed.

1.5.6 Further description of the Proposed Development Site and its surroundings is provided in **Chapter 3:** The Site and Surrounding Area (ES Volume I - **Application Document Ref. 6.2**).

1.6 The Development Consent Process

1.6.1 As a NSIP project, the Applicant is required to obtain a DCO to construct, operate and maintain the generating station, under Section 31 of the 2008 Act. Sections 42 to 48 of the 2008 Act govern the consultation that the promoter must carry out before submitting an application for a DCO and Section 37 of the 2008 Act governs the form, content and accompanying documents that are required as part of a DCO application. These requirements are implemented through the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) ('APFP Regulations') which state that an application must be accompanied by an ES, where a development is considered to be 'EIA development' under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations).

1.6.2 An application for development consent for the Proposed Development has been submitted to the Planning Inspectorate (PINS) acting on behalf of the Secretary of State. Subject to the Application being accepted (which will be decided within a period of 28 days following receipt of the Application), PINS will then examine it and make a recommendation to the Secretary of State, who will then decide whether to make (grant) the DCO.

1.7 The Purpose and Structure of this Document

1.7.1 The purpose of this document is to provide information on the other consents and licences that are, or may be, required under other legislation for the construction and operation of the Proposed Development, outside of the DCO (**Application Document Ref. 2.1**).

1.7.2 The document will be updated by the Applicant, as required, during the examination of the Application by the SoS.

1.7.3 The other consents and licences required are presented in Table 1 of Section 2.

2.0 OTHER CONSENTS AND LICENCES

2.1.1 Table 1, below, lists the type of consent/ licence required, the relevant consenting body, any agreement that has been reached with that body, actions to be undertaken and the status of the relevant application (e.g. whether the consent/ licence has been granted or the anticipated application submission date).

Table 1: Other Consents and Licences

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
0	Development Consent Order	Planning Act 2008	Secretary of State for Business, Energy and Industrial Strategy (BEIS)	Works set out within Schedule 1 of the Draft DCO taking place within the Order Limits	Required prior to construction	Application finalised	Submitted June 2021
1	Electricity Generation Licence	Section 6 of The Electricity Act 1989 (licences authorising supply, etc.)	Office of Gas and Electricity Markets (OFGEM)	Licence required for the generation of electricity by the generating station (**Work No. 1**)	Required prior to operation	Not yet progressed	To be applied for prior to commissioning of the Proposed Development
2	Hazardous Substances Consent	Sections 4 and 6 of The Planning (Hazardous Substances) Act 1990 & Schedule 1 of The Planning (Hazardous Substances) Regulations 2015	Local Planning Authority (LPA) (North Lincolnshire Council (NLC)) who would consult the Health and Safety Executive (HSE)	Proposed PCC Site chemical storage	May be required prior to operation	Not yet progressed. If required. Hazardous Substances Consent application to be prepared for submission to LPA	Would be applied for during construction once the volumes of hazardous substances to be stored on site are known

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
3	The Control of Major Accident Hazards (COMAH) Licence	The Control of Major Accident Hazards (COMAH) Regulations 2015	HSE	Proposed PCC Site.	Licence required prior to operation. Notification required prior to construction.	Cannot progress until detailed design stage. If required, COMAH licence application to be prepared for submission to HSE. Early contact to be made with the HSE during detailed design to determine whether a safety report is required and if so, what information it is required to contain.	Notification to be made required prior to construction. Would be applied for during construction once the volumes of hazardous substances to be stored on site are known.
4	Greenhouse Gas Permit	Emissions Trading Scheme Order 2020	Environment Agency (EA)	Will be required for the emission of carbon dioxide from the plant	Required prior to operation	New permit will be required. Not commenced	Application submission prior to commissioning of the plant
5	Construction Noise Consent	Section 61 of The Control of Pollution Act 1974	LPA - NLC	May be required prior to construction of the Proposed	May be required prior to construction	No action required at present	Would be applied for prior to the start of construction, or prior to specific

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
				Development for certain activities			construction activities, if required
6	Notification of Construction Works	The Construction (Design and Management) CDM Regulations 2015	HSE	The Proposed Development Site	Required prior to construction	Not yet required. HSE should be notified in writing prior to the start of construction work using the HSE F10 Form. Submitted prior to appointment of contractor by the Applicant	HSE will be notified prior to the commencement of construction
7	Permit for Transport of Abnormal Loads	The Road Vehicles (Authorisation of Special Types) (General) Order 2003 or The Road Traffic Act 1988	Vehicle Certification Agency (VCA) (the Executive Agency of the Department for Transport), Highways England and local highway authority (NLC)	Local highways including the strategic road network and loads arriving from the River Trent	Required prior to Construction. May also be required prior to major outages during operation of the Proposed Development	Not yet required. The need will be determined by the Engineering, Procurement and Construction (EPC) contractor. Details for the management of Abnormal Loads and Abnormal Indivisible Loads ('AILs') are	A permit(s) would be sought once the number and type of Abnormal Loads and AILs has been established following appointment of the contractor

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
						secured within the 'Construction traffic management plan' requirement in Schedule 2 of the draft DCO	
8	Temporary Traffic Regulation Order (TTRO)	Section 14(1) Road Traffic Regulation Act 1984	Local highway authority (NLC)	Anticipate likely to be required for construction traffic management on A18 for main works phase. May also be required e.g. in respect of crossings on Chapel Lane, creating new access or to minimise queueing/ prevent certain turns during the construction period.	May be required prior to construction. May also required prior to major outages during the operation of the Proposed Development	Not yet required. The need will be determined by the EPC contractor/ outage maintenance contractor	TTRO would be sought once the number and nature of TTRO is established following appointment of the contractor/ prior to major outages

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
				The need will be determined by the contractor			
9	Agreement for the carrying out of works to the public highway	Section 278 Highways Act	Local highway authority (NLC)	Can be required to allow any required works to the public highway necessary to create a new or modified access (i.e. crossing the highway verge and tying in works that are proposed at the A18 access)	May be required prior to construction	Not yet required. Powers within DCO likely to preclude need for this	Would be required prior to start of construction
10	Building Regulations Approval	The Building Regulations 2010 (as amended)	Local authority (NLC)	Will be required in respect of buildings and structures forming part of the Proposed Development	Required prior to operation	Not yet required	Buildings Regulations Approval would be sought prior to and during the construction phase
11	Environmental Permit (for operation of	The Environmental Permitting	EA	A bespoke permit will be required for the operation	Required prior to operation	In progress.	Application expected to be

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
	the power station)	(England and Wales) Regulations 2016 (as amended)		of the power station (**Work No. 1**). This may take the form of a substantial variation to existing permits or a new permit. Scope to be defined and may require partial surrender of land			submitted to the EA in Q2 2021
12	Water Abstraction Licence (for Potential Canal Water Abstraction Option)	Sections 24 and 25 of The Water Resources Act 1991 (as amended)	EA	An abstraction licence will be required to provide cooling water for the Proposed Development. The licence holder and therefore applicant in respect of the Canal Water Abstraction would	Required prior to construction if Potential Canal Water Abstraction Option is selected	Pre-application submission made by Canal and River Trust on behalf of Applicant	EA may need to be engaged on this at present.

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
				be the Canal and River Trust			
13	Water Abstraction Licence (for Potential River Water Abstraction Option)	Sections 24 and 25 of The Water Resources Act 1991 (as amended)	EA	An abstraction licence will be required to provide cooling water for the Proposed Development	Required prior to construction if Potential River Water Abstraction Option is selected	Variation of the Keadby 1 Power Station abstraction licence.	This is not the preferred option for abstraction. If it should be chosen then a variation application would be submitted prior to the start of construction.
14	Environmental Permit (Flood Risk Activities)	The Environmental Permitting (England and Wales) Regulations 2016	EA	Required for any activities which will take place: • on or within 8 metres of a main river (16 metres if tidal) • on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)	Required prior to construction.	Required for works close to EA main rivers and flood defences, including the Stainforth and Keadby Canal, the Three Rivers, Hatfield Waste Drain (Mabey Bridge/ A18 works) and the River Trent. Not yet progressed	Where required, application submission will be at least 2 months prior to start of construction

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
				• on or within 16 metres of a sea defence • involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert • in a floodplain more than 8 metres from the riverbank, culvert or flood defence structure (16 metres if it's a tidal main river) and planning permission is not in place			
15	Ordinary Watercourse Land Drainage Consent	Sections 23 and 66 of The Land Drainage Act 1991 (prohibition on	NLC/ Isle of Axholme and North Nottinghamshire Water Level	Required for the proposed surface water discharge (**Work No. 5**) and other works	Required prior to construction.	Not yet progressed.	Application to be submitted prior to relevant works commencing, if required

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	(works to structures) Land Drainage Consent	obstructions etc. in watercourses, known as land drainage consent)	Management Board (the Internal Drainage Board (IDB))	affecting ordinary watercourses (See Table 12.7 of **Chapter 12**: Water Environment And Flood Risk (ES Volume I – **Application Document Ref. 6.2**)			
16	Permit for temporary storage within the floodplain of a main river	Standard Rules Permit (SR2015 No.29)	EA	May be required for certain activities during construction of the Proposed Development	May be required prior to construction	Not yet progressed	Application to be submitted prior to commencement of Construction, if required
17	Consent to discharge to foul sewer	Water Industries Act 1991	Relevant water authority – Severn Trent Water	Required for the discharge of foul drainage from the Proposed Development	Required prior to construction	Not yet progressed	Application would be submitted prior to construction if required by the Applicant
18	Environmental Permit (for discharge to surface water)	The Environmental Permitting (England and Wales)	EA	May be required for discharge of uncontaminated surface water from any	May be required prior to construction	Not yet progressed	Application would be submitted prior to construction if

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		Regulations 2016 (as amended)		dewatering of excavations from the Proposed Development Site if this lasts for more than 3 continuous months			required by the contractor
19	Gas Safety Case	The Gas Safety (Management) Regulations 1996 (Regulation 3)	HSE	Will be required in connection with the Proposed Gas Connection (**Work No. 2**).	Required prior to construction	Not yet progressed. A safety case must be prepared and submitted to the HSE for approval prior to gas being conveyed. An exemption may apply	Safety case will be submitted prior to commencement of construction of the Proposed Gas Connection.
20	Pipeline Safety Notification	The Pipeline Safety Regulations 1996 (Regulation 20)	HSE	Will be required in connection with the Proposed Gas Connection (**Work No. 2**)	Required prior to construction	Not yet progressed. HSE must be notified a minimum of 6 months prior to commencement of construction of the	HSE will be notified a minimum of 6 months prior to commencement of construction of the Proposed Gas Connection

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						Proposed Gas Connection	
21	Planning & Advanced Reservation of Capacity Agreement (PARCA)	n/a	National Grid Gas plc	Required to reserve capacity	Required prior to operation	Not yet progressed although Applicant in dialogue with NGG and the gas capacity is currently being used by Keadby 1	Capacity to be confirmed and reserved prior to operation
22	Network Exit Agreement for connection to the National Transmission System	n/a	National Grid Gas Plc	Required in connection with the Proposed Gas Connection	Required prior to operation	Not yet progressed	Application to be submitted prior to commencement of construction
23	Fire Notice	The Regulatory Reform (Fire Safety) Order 2005	Local fire and rescue authority	The Proposed Development Site	Required prior to construction	Not yet progressed	Would be applied for prior to the start of construction, or prior to specific construction activities, if required

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24	Marine Licence	Marine and Coastal Access Act 2009	Marine Management Organisation (MMO)	Any works within the UK Marine Area (i.e. within or over the tidal River Trent) The preferred option is that the DCO will incorporate a Marine Licence 'deemed' within the body of the DCO – a DML	Required prior to construction	Discussions progressing with MMO and DML forms a schedule in the draft DCO (**Application Document Ref.2.1**) .	
25	SSSI Assent / Consent under Section 28E(1)(a) of the Wildlife and Countryside Act 1981	Wildlife and Countryside Act 1981	Natural England	The Proposed Development Site	Required prior to construction	Not yet progressed.	Notice of intention to complete works should be submitted to Natural England ahead of commencement. This notice should include, as a minimum: start date; end date; details of works; location of works;

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							and any foreseen impacts
26	European Protected Species Licence (EPSM)	The Conservation of Habitats and Species Regulations 2017 (as amended)	Natural England	The Proposed Development Site	May be required prior to construction	Not yet progressed as none known to be required Pre-construction surveys would be undertaken to confirm the position (and the need for any licence(s)) prior to construction works. The pre - construction surveys are secured by a requirement within the DCO. Required for any components of the Proposed Development that affect protected species	Application would be submitted prior to start of construction if required. Timing of pre-construction surveys to take into account seasonal requirements and time taken to obtain licence

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
27	Water Vole Licence	Wildlife and Countryside Act 1981 (as amended) Section 10(3)(c)	Natural England	The Proposed Development Site	Required prior to construction	Not yet progressed. Likely to be required pre-construction to undertake works in and around ditches which may displace water voles. Exact nature of licence required to be agreed following pre-construction surveys	Application to be submitted prior to start of construction if required. Timing of pre-construction surveys to take into account seasonal requirements and time taken to obtain licence
28	Badger licence to interfere with setts for development purposes	The Protection of Badgers Act 1992	Natural England	The Proposed Development Site	May be required prior to construction	Not yet progressed. Required for any components of the Proposed Development that have the potential to disturb these species.	Natural England does not grant precautionary licences. Application to be submitted prior to start of construction, if required
29	Connection Agreement for connection to	Connections and Use of	National Grid Electricity	Required in connection with the Proposed	Required prior to construction.	Not yet progressed.	Application to be submitted prior to

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	the Electricity Transmission system through the ModAp (Modification Application) process	Systems Code (CUSC)	System Operator (NGESO)	Electrical Connection (**Work No. 3**) which involve modifications in existing 400kV substation			commencement of construction
30	Commercial agreement for a 132kV electrical supply from the Northern Powergrid 132kV Substation	Commercial agreement	Northern Powergrid	Potential Electrical Connection to Northern Powergrid 132kV Substation	May be required prior to construction.	Distribution connection options have been discussed with Northern Powergrid.	If required, an application for an offer to connect to the distribution network would be submitted in late 2021 and receipt of a formal offer would be expected in early 2022.
31	Consent for buildings, structures or planting in vicinity of IDB drains	IDB Byelaw 10	IDB	Any works within 9m of IDB watercourses within the Proposed PCC Site, Electrical Connection to 132kV substation, Emergency	Required prior to construction. Byelaw 10 requires IDB consent to be given for buildings/ structures/ planting within	Not yet progressed	Application to be submitted prior to construction activities, where required

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				Access Road and Water Discharge Corridor	9m of landward toe of embankment/ wall, within 9m of top of batter where there is no embankment/ wall or within 9m of enclosing structure for enclosed watercourses		
32	Consent for installing a bridge in vicinity of IDB watercourse	IDB Byelaw 17(d)	IDB	Any structures in, over or above IDB watercourses	Required prior to construction. Byelaw 17(d) requires consent for "*any fence, post, pylon, wall, wharf, jetty, pier, quay, bridge, loading stage, piling, groyne, revetment or any other*	Not yet progressed	Application to be submitted prior to construction

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
					building or structure whatsoever in, over or across any watercourse or in or on any bank thereof."		
33	Consent for Bridges and Culverts in vicinity of IDB drains	IDB Byelaw 17(c)	IDB	Any works that affect structures for the passage of water into or out of IDB watercourses or banks	Required prior to construction. Byelaw 17(c) requires consent for any works that affect structures for the passage of water in, into or out of any IDB watercourse or bank.	Not yet progressed	Application to be submitted prior to construction
34	Consent for service crossings	Byelaw 17(a) Fences, Ditches and Pipes	IDB	Any services or pipes in, under or over IDB watercourses or banks	Required prior to construction. Byelaw 17(a) requires consent for any	Not yet progressed	Application to be submitted prior to construction

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					gas or water main/ pipe/ electrical main or cable in, over or under any IDB watercourse or bank		
35	Introduction of Water	Bylaw 3	IDB	Consent to introduce water to any IDB watercourse	Required prior to construction. Byelaw 3 requires consent for any development that would introduce water into an IDB watercourse	Not yet progressed.	Application to be submitted prior to construction
36	Installation of engineering features within or adjacent to riparian watercourses	Land Drainage Act – IDB Byelaws	IDB	Any works that obstruct the flow of a riparian watercourse or construction or alteration of a culvert within the channel of a	Required prior to construction	Not yet progressed	Application to be submitted prior to construction

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				riparian watercourse. The Proposed PCC Site is bounded to the east and west by riparian watercourses. The applicant is also likely to have a riparian responsibility to maintain the proper flow of water in any riparian watercourse which borders or flows through land			
37	Regulations on aeronautical activity	Civil Aviation Air Navigation Order 2016	Civil Aviation Authority (CAA)	Part 8 sets requirements to light objects which may prove an obstacle to aircraft. Lights which dazzle or distract pilots, or	Required prior to construction.	Not yet progressed. Any crane of a height of 60m or more will need to be equipped with aviation warning lighting in line with	EPC contractor will be responsible for implementing aviation warning lighting as required during construction, secured by

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				which are otherwise liable to endanger aircraft, are prohibited		CAA guidance concerning crane operations	Requirement 2 of the draft DCO (**Application Document Ref. 2.1**)
38	Regulations on aeronautical activity	CAP168 Licensing of Aerodromes	CAA	Objects of a lesser height (than 150m) may be assessed as hazards to aviation and also treated as obstacles. They should be marked and/or lit as detailed	May be required prior to construction	Not yet progressed	Notification to be submitted by EPC contractor prior to construction if required
39	Guidance on cranes and lighting in relation to aviation activity	CAP1096: Guidance to crane users on the crane notification process and obstacle lighting and marking	CAA	Use of cranes 60m above ground level during construction	Required prior to construction. Aviation warning lighting must be fitted to all cranes of 60m or more in height. The CAA Airspace Regulation	Not yet progressed	EPC contractor to be responsible for adhering to guidance during construction

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					section must be notified prior to use of cranes over 300ft (91.4m) above ground level. If a >300ft crane is to be in place for in excess of 90 days, it should be considered a permanent structure and also notified to the CAA Defence Geographic Centre		
40	Water Abstraction Licence (Dewatering during construction)	Sections 24 and 25 of The Water Resources Act 1991 (as amended)	EA	May be required for dewatering excavations during construction	An abstraction licence will be required if the contractor intends to abstract >20m^3/day	Not yet progressed made by EPC contractor	Prior to start of construction

No.	Consent/ Licence	Relevant Legislation/ Guidance	Relevant Body	Development Component	Requirement for Consent/ Licence	Status/ Action	Anticipated Onward Timescales
41	Groundwater investigation consent	Section 32 of The Water Resources Act 1991 (as amended)	EA	May be required for test pumping, prior to dewatering excavations during construction	Consent needed if, before applying for a water abstraction licence, the EPC contractor plans to test pump (>20m^3/day) to investigate aquifer properties and assess the risks to surrounding water features	Not yet progressed	Prior to start of construction